## **IN THE CLAIMS**

20. (Once Amended) An illumination arrangement for a stereo microscope, in particular, a Greenough type stereo microscope with adjustable magnification, comprising:

at least one illumination channel arranged in a plane which is arranged essentially orthogonally with respect to a plane of the two observation channels wherein the illumination direction is carried out at an angle to the optical axis of the microscope by means of least one light conductor wherein the light conductor extends at least partially in the interior of the microscope housing and the light conductor is guided around the observation optics and a maximally visible object field is illuminated.

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- 26. (Once Amended) The illumination arrangement according to claim 25, wherein the light guide is selected from the group consisting of a flexible glass light guide, and a plastic light guide, and a fluid light guide.
  - 27. Please cancel claim 27.
- 28. (Once Amended) The illumination arrangement according to claim 25, wherein the illumination is carried out via an end of the light guide.
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- 29. (Once Amended) The illumination arrangement according to claim 25, wherein the illumination is carried out via illumination optics arranged following an end of the SN 09/462,961 EL 915 668 864 US #77017

light guide.

30. (Once Amended) The illumination arrangement according to claim 29, wherein the illumination optics are arranged so as to be adjustable with respect to the image scale as zoom system.

31. (Once Amended) The illumination arrangement according to claim 29, wherein a motor-operated control is provided for adjusting the illumination optics.

32. (Once Amended) The illumination arrangement according to claim 29, wherein, when the illumination optics are adjusted as an illumination zoom system, the adjustment being coupled to the adjustment of the microscope zoom system.

40. (New)

An illumination arrangement for a stereo microscope, in particular,

a Greenough type comprising:

a least one illumination channel arranged in a plane essentially orthogonal to the plane of the two observation channels, wherein the illumination is effected at an angle to the optical axis of the microscope by means of at least one light conductor so that no direct light falls into the observation channels and a florescence excitation is effected through the light conductor.

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- 41 (New) The illumination arrangement according to claim 29, wherein the illumination optics are arranged so as to be displaceable with respect to the image scale as zoom system.
- 42. (New) The illumination arrangement according to claim 29, wherein the illumination optics are arranged so as to be swivelable with respect to the image scale as zoom system.
- 43.(New) The illumination arrangement according to claim 29, wherein a handactuated control is provided for adjusting the illumination optics.
- 44. (New) The illumination arrangement according to claim 20, wherein a fluorescence excitation is carried out via the illumination channel.